

HOW TO SET UP YOUR SUTURE WORKSHOP

BY WARREN WIECHMANN, UC IRVINE

The Suture Workshop is one of the fundamental skills workshops available to an Emergency Medicine Interest Group for two reasons - first, it is a skill commonly used in many different disciplines; and second, it is one of the skills that medical students can use and are expected to use during their clinical rotations. This document can hopefully serve as a guide for setting up a successful workshop.

WHAT MATERIALS DO WE NEED FOR THE WORKSHOP?

- 1 set of Pickups and a Needle Driver for each student
- Disposable Scalpels
- Scissors
- Surgical Pads (“Chucks”) - can be replaced with paper plates or trash bags.
- Trash bags
- Sharps Container
- Gloves and Goggles
- Sutures
- Knot-tying boards
- String or shoe-laces for knot-tying

WHERE DO WE GET THESE MATERIALS?

For most medical schools with an affiliated hospital, the Department of Surgery or Department of Emergency Medicine usually has extra suture kits for instruction purposes. Another option is approaching the Operating Room (OR) facilities manager or Scrub Nurse and asking for “retired” pickups and needle drivers. The OR usually has a high turnover of equipment and they usually dispose of “older” equipment that is still perfectly good for teaching purposes.

For sutures, ask the sources above...they usually have “old” sutures or extra packs that they don’t need and are willing to donate. You can also approach companies such as BD, Ethicon, US Surgical, and Davis & Geck, and see if they’re willing to donate a box or two of sutures. The hospital or departments often have affiliations with representatives from these companies and they are usually pretty generous with donating extra sutures for teaching purposes.

These companies often have knot-tying boards and other teaching tools (manuals) that they can offer.

If all else fails, you can always purchase these items from online retailers.

WHAT WILL WE PRACTICE OUR SUTURES ON?

There are a couple of options depending on availability and budget:

>> **Pig's Feet** - relatively cheap and can be found at local markets. Skin is a bit thicker than human skin, but they are easy to handle and layers of skin are easy to visualize. Some places freeze the pig's feet, so make sure that they're thawed before use. Gloves and Goggles are a must.

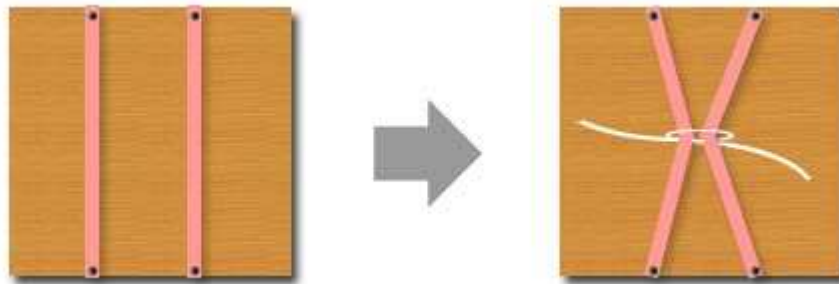
>> **Oranges or other fruit with a rind** - relatively cheap as well, with the rind serving as "skin." The fruit can be cut in half and "wounds" can be made using oval-shaped incisions so that wound can actually be closed during suturing. Gloves and Goggles helpful.

>> **Chamois and paper towels** - staple or tack a couple of layers of paper towels topped with a chamois cloth to a piece of cardboard or wood. For a more realistic feel, some students have replaced the paper towels with a thin layer of foam and dampened the whole thing.

>> **Kitchen Sponges** - the two-in-one sponges (ScotchBrite) work pretty well. Again, the sponge can be dampened to make it feel more realistic.

HOW CAN WE SIMPLY PRACTICE MY TIES?

As mentioned above, suture companies offer knot-tying boards for practicing ties. However, all you really need is some thin rope or a shoe lace and something to tie it around. You can easily make your own knot-tying board by affixing a couple of heavier rubber bands to a piece of wood parallel to one another. To practice wound approximation, simply practice your ties by bringing the two bands together.



WHAT CONTENT SHOULD WE COVER?

Important background topics include wound management and healing, hemostasis, some basic infection information. Actual procedure topics depend on the level of your students - 2 hand ties vs. 1 hand ties, instrument ties, running vs. interrupted sutures.

For reference, we have included the handout that UC Irvine currently provides its students; however, this is not a definitive handout. There are a large number of suture/wound management sites online and in Emergency Medicine and Surgery textbooks.

In the included handout, we have chosen to exclude diagrams of how to perform each tie, because they are difficult to clearly depict graphically. We have found that the ties are best taught by an instructor (or upper-class medical student) to a group of 4-5 students.

HOW SHOULD WE STRUCTURE THE WORKSHOP?

The actual format is a matter of preference, but we have found it beneficial to begin the workshop with a brief lecture (10-15 minutes) by an EM faculty member or resident who can cover some of the general background information of wound management, hemostasis, etc. We usually provide food during this part since food is usually a good method of attracting students.

At this point, we break everyone up into groups of 4-5 students, each group having an instructor (usually a 3rd or 4th year medical student or resident), who can then walk them through some basic ties and sutures.

The workshop is quite flexible and can be modified according to the skill level of each group.

QUESTIONS OR COMMENTS?

We hope that this document serves as a helpful guide to get your workshop up and running. If you have any questions or would like to submit some suggestions of your own for this workshop or any other workshops, please email us at info@aaemrsa.org.